



Australian Government

FWPFGM6203 Manage sustainable tree inventory

Release: 1

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Modification History

Release	Comment
1	Replaces superseded equivalent FPIFGM6203 Manage sustainable tree inventory which was first released with FPI11 Forest and Forest Products Training Package Version 2.2.

Application

This unit of competency describes the outcomes required to develop a tree inventory plan to manage an inventory of forestry timber assets. The unit applies to those people who manage forests for enterprises but may also apply to people who have responsibility for sustainable tree management in urban or rural enterprises.

The unit applies to job roles including Forest Auditor, Forest Planner, Environmental Manager, Environmental Planner Forest Sustainability Manager And Sustainability Manager.

No licensing, legislative, regulatory, or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil.

Unit Sector

Forest Growing and Management

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.</i>
1. Conduct risk assessment for managing tree inventory	1.1 Research and analyse sustainable tree management requirements. 1.2 Identify resources and site characteristics. 1.3 Research and assess external influences on tree inventory.

ELEMENTS	PERFORMANCE CRITERIA
	1.4 Identify risks and potential outcomes related to identified resources and site characteristics and document risk management strategy.
2. Obtain approvals for development of tree inventory plan	2.1 Consult stakeholders and obtain support for development of tree inventory plan and management approach. 2.2 Obtain approval for identified inventory plan and management approach.
3. Prepare tree inventory plan for sustainable forest management	3.1 Identify administrative tools, physical resources and recording methodology. 3.2 Identify forest estate and associated management requirements. 3.3 Forecast required human and financial resources to manage inventory. 3.4 Establish quality assurance practices for collecting, documenting and verifying data. 3.5 Clearly document plan and communicate to appropriate personnel.
4. Manage the implementation of tree inventory plan	4.1 Explain inventory plan requirements and responsibilities to participating stakeholders. 4.2 Provide stakeholder support to ensure quality outcomes and objectives are met. 4.3 Monitor finances and resources and maintain record keeping systems. 4.4 Monitor risks and implement contingency management processes.
5. Evaluate tree inventory plan	5.1 Collect, analyse and store data about tree inventory in line with organisational procedures. 5.2 Identify and investigate variations in tree inventory outcomes and objectives. 5.3 Consult appropriate stakeholders on variation between desired results and actual outcomes. 5.4 Evaluate outcomes and processes against tree inventory plan. 5.5 Prepare recommendations for future plans based on consultation and analysis.

Foundation Skills

This section describes those core and employment skills that are essential to performance and are not explicit in the performance criteria.

Numeracy skills to:	Analyse complex numerical data involving areas, ratios, percentages, volumes, lengths and diameters.
Oral communication skills to:	Hold high-level consultative discussions to generate ideas for and negotiate content of tree inventory plans.
Reading skills to:	Interpret complex information in a range of source documents to research and develop tree inventory plans.
Writing skills to:	- Develop and document comprehensive tree inventory plans. - Report on effectiveness of inventory management approach and potential improvements including rationale for recommendations.
Planning and organising skills to:	- Source, collect and organise a range of data to inform plan content. - Plan and manage own timing and productivity to plan, implement and evaluate management of tree inventory.
Technology skills to:	Use a computer, keyboard and software to prepare plans and reports.

Unit Mapping Information

FPIFGM6203 Manage sustainable tree inventory

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

Assessment Requirements for FWPFGM6203 Manage sustainable tree inventory

Modification History

release	Comment
1	Replaces superseded equivalent FPIFGM6203 Manage sustainable tree inventory which was first released with FPI11 Forest and Forest Products Training Package Version 2.2. Assessment requirements now specify the performance and knowledge evidence, as well as assessment conditions for this unit of competency. These sections simplify and replace components used in the previous unit format, including 'Required Skills and Knowledge, Evidence Guide and Range Statement'.

Performance Evidence

A person demonstrating competency in this unit must satisfy all of the elements, performance criteria and foundation skills of this unit, and must be able to provide evidence that they can:

- Develop a comprehensive written plan to manage sustainability tree inventory for a given site.
- Incorporate these inclusions in the plan:
 - risk management strategy to manage and minimise risks
 - quality assurance practices for collecting, documenting and verifying data
 - required data collection and administrative tools
 - required human resources and responsibilities
 - data recording methodology
 - recording and reporting procedures.
- For a specified period, analyse data and record and report on the following types of outcomes:
 - established growth rates
 - established volumes
 - forecasted outputs
 - forecasted sustainability
 - monitored sustainability
 - preserved forest sustainability.
- Evaluate the effectiveness of the tree inventory plan and complete a report including recommendations for improving future plans and tree management approach.

Knowledge Evidence

A person competent in this unit must be able to demonstrate knowledge of:

- Role of wood or waste products in generating renewable energy through biomass.
- Behavioural characteristics of a range of tree species.
- Silvicultural practices associated with management objectives.
- Key sustainability indicators for tree management.
- Key content and application of mensuration theory.
- Risks involved managing a sustainable tree inventory and methods used to minimise impacts, including:
 - biological
 - pests and diseases
 - weather and climate change
 - economic risk
 - erosion
 - fire
 - market failure
 - natural disaster
 - sabotage
 - water
 - structural failure.
- External influences and how they impact on managing a sustainable tree inventory, including:
 - international and Australian forestry and environmental standards
 - state, territory and local laws
 - advisory standards and codes of practice
 - land tenure and access
 - neighbouring tenure and access
 - habitat
 - cultural and heritage sites
 - agriforestry arrangements
 - fire management
 - data availability
 - human resource skills and availability.
- Purpose, features and application of inventory management tools, including:
 - measuring or diameter tapes
 - dataloggers and laptops
 - log sheets
 - compass
 - clinometer
 - height sticks

- prisms
- mobile GPS
- maps
- survey and title data
- survey equipment
- gantt charts
- flow charts.
- Key features and benefits of different recording methodologies, including:
 - dataloggers
 - log sheets
 - manual or electronic data transfer
 - analytical techniques and formulae
 - radio, UV, laser advanced technology
 - digital dataloggers and laptop computers
 - desk or field surveys
 - testing and calibration records.
- Organisational procedures specific to managing sustainable tree inventory:
 - communication reporting lines
 - database management and document control.

Assessment Conditions

The following resources must be made available:

- Computers, keyboards, printers and software used to document plans and reports.
- Administrative tools and equipment for managing sustainable tree inventory:
 - filing systems
 - field templates
 - operational manual
 - land access information
 - gantt charts
 - flow charts.
- Documents and commonly used proformas used to document risk management strategies and tree inventory plans.
- Organisational procedures for managing sustainable tree inventory.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Assessor requirements

Assessors must:

- Hold the appropriate assessor competency standards as outlined in regulations; and
- be able to demonstrate vocational competencies at least to the level being assessed; and
- be able to demonstrate how they are continuing to develop their VET knowledge and skills as well as maintaining their industry currency and assessor competence.

Links

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